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(72) Inventor: Sasaki, Takamasa  
Minato-ku, Tokyo (JP)

(74) Representative:  
VOSSIUS & PARTNER  
Siebertstrasse 4  
81675 München (DE)

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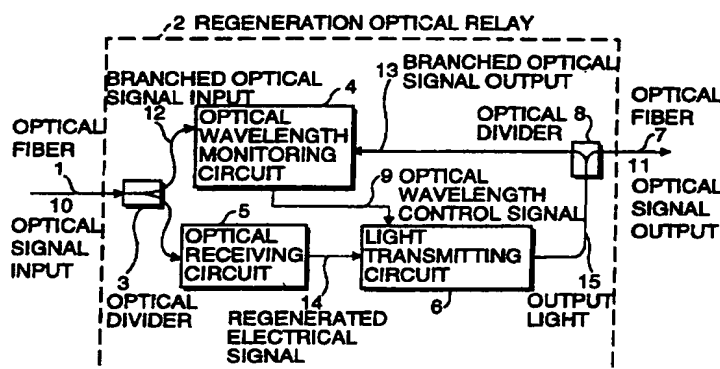
(71) Applicant: NEC CORPORATION  
Tokyo (JP)

(54) Method and device for regeneration and relay of optical transmission signal and wavelength division multiplexing transmission system using the same

(57) Provided are a regeneration relay 2 which comprises a light receiver 5 for converting an inputted optical signal 10 to an electrical signal, thereby outputting the electrical signal 14; a light transmitter 6 for converting the electrical signal 14 outputted from the light receiver 5 to an optical signal, thereby outputting the optical signal while varying a wavelength of the optical signal; and a wavelength monitor 4 for controlling the light transmitter 6 so that a wavelength of a light outputted from the light transmitter 6 and a wavelength of a

light inputted to the light receiver are made to be equal to each other. Provided is an optical regeneration relay used in a wavelength multiplexing transmitting system, which is capable of relaying a regenerated light with a simple constitution and facilitating a control of a wavelength of a signal on a transmitting path by monitoring a wavelength of a first stage wavelength multiplexing unit for outputting a signal to the transmitting path.

Fig.2



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# EUROPEAN SEARCH REPORT

Application Number  
EP 99 11 3627

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				TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims				
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>26 January 2001</b>		Examiner <b>Goudelis, M</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  &amp; : member of the same patent family, corresponding document</p>				

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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